

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of advance Hazard Identification Beacons and the modification of an existing Pedestrian Hazard Identification Beacon at the intersection of MD 279 (Newark Ave) and James Street in Cecil County, MD 279 (Newark Ave) is assumed to run in an east-west direction.

II. INTERSECTION OPERATION

- This intersection is to operate as a pedestrian crossing signal with the MD 279 (Newark Ave) approaches running concurrently in a flashing yellow mode during school hours. Hazard Identification Beacons installed in advance of James Street along MD 279 shall also flash yellow during school hours. The James Street approach shall operate in a flashing Red mode. A pushbutton actuated exclusive pedestrian phase shall be provided across the east leg of the intersection. During this phase all approaches shall be RED.
- A full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "5" pole-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A.

ITEM NO.	DESCRIPTION	QUANTITY
9042	Controller ASC II with telemetry	1 EA
9043	Controller cabinet, size "5"	1 EA
9571	Sheet aluminum signs to consist of: (mast arm or pole mount) S1-1(1) "SCHOOL CROSSING AHEAD (SYMBOLIC)" sign (36"x42").	21 SF 2 EA

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	2 EA
2002	Test Pit Excavation	4 C.Y.
5005	24" white heat applied permanent preformed thermoplastic pavement marking	50 L.F.
8010	Furnish and install 12" pedestrian signal head section	4 EA
8011	Furnish and install 12" vehicular traffic signal head section	16 EA
8019	Furnish and install 8" vehicular traffic signal head section.	4 EA
8030	Furnish and install breakaway pedestal pole (10').	1 EA
8030	Furnish and install breakaway pedestal pole (14').	3 EA
8032	Pedestrian pushbutton and R10-4(1) sign. (Note: Sign to read "PUSHBUTTON TO CROSS NEWARK RD".)	2 EA

EQUIPMENT LIST (CONT)

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	DESCRIPTION	QUANTITY
8042	Install conduit bend (3") in existing foundation.	1 EA
8048	Remove and dispose of existing material and equipment per assignment.	1 EA
8051	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched	1240 L.F.
8052	Furnish and install 4" schedule 80 rigid polyvinyl chloride conduit - bored.	70 L.F.
8057	Furnish and install concrete for signal foundation.	4 C.Y.
8060	Furnish and install No. 6 AWG stranded bare copper ground wire.	1615 L.F.
8064	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	215 L.F.
8072	Furnish and install electrical handhole.	10 EA
8075	Install overhead sign.	21 S.F.
8080	Furnish and install ground rod - 3/4" x 10'.	4 EA
8082	Furnish and install electrical cable - 2 conductor (No. 14 AWG).	110 L.F.
8083	Furnish and install electrical cable - 3 conductor (No. 14 AWG).	125 L.F.
8084	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	1735 L.F.
8092	Install controller and cabinet pole mount.	1 EA

C. EQUIPMENT TO BE REMOVED

SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

The contact persons for District #2 are as follows:

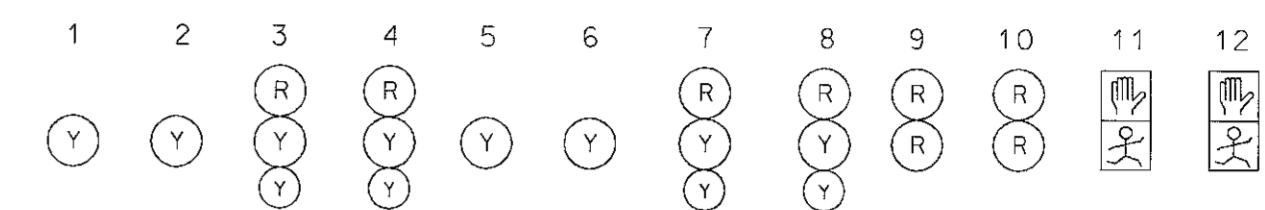
Mr. Robert Kiehl
Assistant District Engineer - Traffic
Phone: (410) 810-3240

Mr. Terry Wright
Assistant District Engineer - Maintenance
Phone: (410) 810-3250

Mr. Barry Clothier
Assistant District Engineer - Utility
Phone: (410) 810-3060

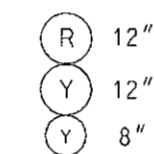
Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
Phone: (410) 787-7630

PHASE CHART

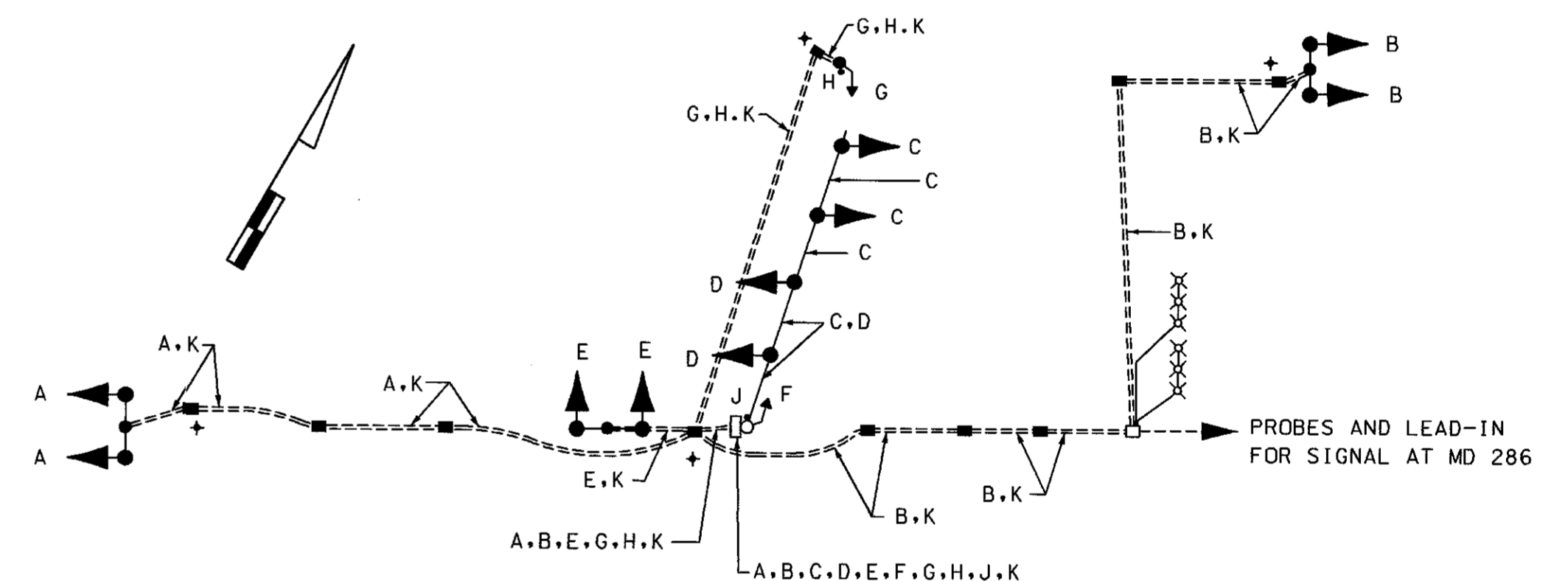


NORMAL OPERATION	DARK	DARK	FL/8"Y	FL/8"Y	DARK	DARK	FL/8"Y	FL/8"Y	DARK	DARK	DW	DW	
PED PHASE WARNING	FL/Y	FL/Y	Y	Y	FL/Y	FL/Y	Y	Y	R	R	DW	DW	
PED PHASE	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	R	WK	WK	
PED CLEAR	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	R	FL/DW	FL/DW	
PED PHASE CHANGE	FL/Y	FL/Y	R	R	FL/Y	FL/Y	R	R	R	R	DW	DW	
FLASHING OPERATION	DARK	DARK	FL/12"Y	FL/12"Y	DARK	DARK	FL/12"Y	FL/12"Y	FL/R	FL/R	DARK	DARK	

NOTE:

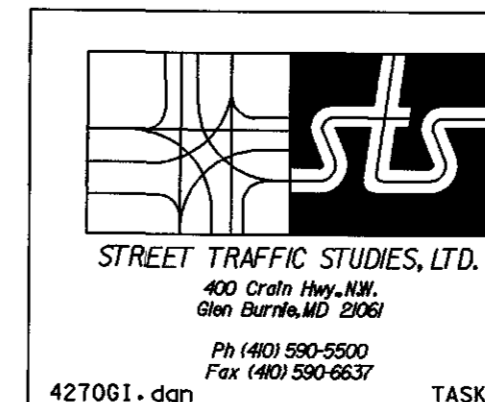


WIRING DIAGRAM



WIRING KEY

- A) 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- F) 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- H) 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- K - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- PS - PROPOSED OVERHEAD SERVICE TO BE INSTALLED BY CONNECT
- + - GROUND ROD



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
MD 279 (NEWARK AVE)
AND JAMES STREET

DRAWN BY: ROB CICCHINI	F.A.P. NO. 4128	TS NO. 4128	SHEET NO. 2 OF 2
CHECKED BY: NONE	S.H.A. NO. 1542455	T.I.M.S. NO. F 419	
SCALE: 1-31-03	COUNTY: CECIL	LOG MILE: 07027901.51	
DATE: 1-31-03			